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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/508,379	06/08/2000	AVRAHAM A. LEVY	035763/0107	7437

7590 05/21/2003

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EXAMINER

IBRAHIM, MEDINA AHMED

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/508,379

Applicant(s)

LEVY ET AL.

Examiner

Medina A Ibrahim

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7-11,14,18-21,26-31,33-40 and 45 is/are pending in the application.
- 4a) Of the above claim(s) 9-11,18-21,26-31,33-36 and 45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1, 7-8, 14, 37-39 is/are rejected.
- 7) ☐ Claim(s) 2 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Applicants' response filed 02/13/03 in reply to the Office action 11/05/02 has been entered.

Claims 1-2, 7-8, 14, 37-40 are under examination.

Claims 9-11, 18-21, 26-31, 33-36 and 45 are withdrawn from consideration as being drawn to the non-elected invention.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

All objections and rejections not stated below have been withdrawn.

Claim Rejections - 35 USC § 112

Claims 1, 7-8 and 37-39 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a method of producing a mutant miniature tomato plant having a desired trait, does not reasonably provide enablement for a method that employs any mutant miniature plant species, other than *L.esculentum* species. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and /or use the invention commensurate in scope with these claims. This rejection is repeated for the same reasons of record as set forth in pages 3-5 of the Office action. Applicants' arguments as set forth in pages 4-6 of the response of 2/10/03 have been fully considered but are not all persuasive.

Applicant's argument that numerous miniature plant varieties are known and available to the ordinary skilled artisan is acknowledged. However, Applicant has

provided no evidence that treating said any miniature plant varieties with any mutation-inducing agent will result in mutant miniature plants with the desired traits and that by crossing said mutant miniature plant with a commercial plant of the same species would result in a progeny that phenotypically resembles the commercial plant and express the desired trait. Applicant has not shown that any mutation-inducing agent can be useful and would not induce undesired mutation in the plant. In addition, since the desired trait includes "reduced size in comparison to the commercial plant", it is unclear how the progeny plant can phenotypically resemble the commercial plant and still express the desired traits. In addition, transfer of specific traits between two plants by breeding methods is unpredictable as evidenced by Bennett et al (1995) and Hunsperger et al (1996), disclosed in the paragraph bridging pages 7 and 8 of the Office action of 02/13/02. To claim a method of generating any mutant miniature plant and any commercial plant with the desired characteristics as recited in the claims and the use of any mutant-inducing agents for specific traits is an invitation to experiment requiring undue trial and error experimentation, as stated in the Office action.

Therefore, given the lack of sufficient guidance regarding the use of any mutant-inducing agent with any miniature plant variety including the exemplified tomato plants for the production of miniature plants having the desired characteristics as recited in the claims, and the unpredictability by mutant-inducing agents in causing random and undesired mutations in plants treated therewith as known to an skilled artisan, the claimed invention is not enabled throughout the broad scope. The rejection is maintained.

Claim Rejections - 35 USC § 102/103

Claim 14 remains rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Scott et al (HortScience, Vol.30, no.3, pages 643-644, 1995). The rejection is repeated for the reasons of record as set forth in the Office action mailed 11/05/02. Applicant's arguments filed in the response of 2/10/03 have been fully considered but are not deemed persuasive.

Applicants argue the claimed plant is not anticipated by the cited reference because the plant disclosed by Scott et al contains one additional mutation produced by spontaneous mutation or somatoclonal variation induced by tissue culture, while the plants in the claimed plant population each carries a different mutation induced by irradiation or a chemical mutagen (response pg. 5-6). This is not persuasive because the claimed plant and the plant taught by Scot are both mutant miniature tomato plants. How the plant is produced is not given a patentable weight as evidenced by *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985) disclosed in the Office action of 11/05/02. There is no evidence that shows the plant of Scott does not possess the unrecited features. Applicants' arguments do not provide clear and convincing evidence that the prior art would neither anticipate nor render obvious the claimed invention. The rejection is maintained.

Remarks

Claims 1-2, 7-8, and 37-40 are free of the prior art of record, in view of arguments in the amendment of 12 August 2002 distinguishing "dwarf" from "miniature".

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Claims 2 and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Papers related to this application may be submitted to Technology Sector 1 by facsimile transmission. Papers should be faxed to Crystal Mall 1, Art Unit 1638, using fax number (703) 308-4242. All Technology Sector 1 fax machines are available to receive transmission 24 hrs/day, 7 days/wk. Please note that the faxing of such papers must conform with the Notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Medina A. Ibrahim whose telephone number is (703) 306-5822. The Examiner can normally be reached Monday-Thursday from 8:30AM to 5:30PM and every other Friday 9:00AM to 5:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Dr. Amy Nelson, can be reached at (703) 306-3218.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0196.

5/16/03
Mai

DAVID T. FOX
PRIMARY EXAMINER
GROUP 180-1638

